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March 25, 2004

### By Electronic Filing

Ms. Marlene H. Dortch Office of the Secretary Federal Communications Commission 445 12<sup>th</sup> Street, S.W., TW-A325 Washington, D.C. 20554

Re:

#### NOTICE OF EX PARTE PRESENTATION

Teton Wireless Television, Inc. WT Docket No. 03-66, RM-10586, WT Docket No. 03-67, MM Docket No. 97-217, WT Docket No. 02-68, RM-9718

#### Dear Ms. Dortch:

Teton Wireless Television, Inc. ("Teton") hereby responds to the February 12, 2004 ex parte letter written by Paul Sinderbrand, counsel to the Wireless Communications Association, Inc., the National ITFS Association and Catholic Television Association (the "Coalition"). The Coalition's ex parte letter responded to an ex parte presentation submitted by Teton, on February 3, 2004. Teton filed its original ex parte presentation in response to an engineering study by Kessler & Gehman that was submitted by the Coalition in its reply comments to the Notice of Proposed Rulemaking in the above-referenced proceeding. <sup>1</sup>

The Coalition alleges that Teton's February 3rd filing was an attempt to discredit the Kessler & Gehman analysis. This is untrue. As demonstrated in the attached Technical Analysis, Teton's filing was made to provide the Commission with a real-world view of the potential for interference that could result from high-site, high-power downstream operations to a potential cellular, low-power operation in a nearby market. Teton demonstrates that the potential for interference is reduced by approximately 95 percent by using an engineering model which has a greater ability to consider propagation over irregular terrain than the model used in the Kessler & Gehman analysis submitted by the Coalition.

Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, Notice of Proposed Rulemaking and Memorandum Opinion and Order, 18 FCC Red 6722 (2003) ("NPRM").

Teton requests that the Commission accept this ex parte in order to ensure that its record is complete. Because this *ex parte* is being filed in the record, no party will be prejudiced by acceptance of this filing.

Respectfully submitted,

TETON WIRELESS TELEVISION, INC.

Terry Smith

Willis E. Twiner

Teton Wireless Television, Inc.

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# Technical analysis of written ex parte presentation of Paul Sinderbrand on February 12, 2004, commenting on "Analyses of A Study of the Impact of the Twin Falls, ID, MMDS/ ITFS Video Operation on Sprint Cell Sites in The Boise-Nampa, ID BTA #50"

We have reviewed the February 12, 2004 letter written by Paul Sinderbrand, counsel to the Wireless Communications Association International, Inc. ("WCA"), responding to the February 3, 2004 ex parte presentation by Teton Wireless Television, Inc. ("Teton"). The studies provided as part of Teton's presentation were not an attempt to "discredit" the Kessler & Gehman analysis to which Teton objected. Rather, the statement sought to offer the Commission a more "real world" view of the potential interference from licensed high-site, high-power, downstream operations in rural Twin Falls, to a potential cellular, low power operation in urban Boise, using an engineering model which has greater ability to consider propagation over irregular terrain with the inclusion of additional propagation factors. As the statement clearly identified, the use of a more comprehensive propagation model was responsible for reducing the predicted interference by approximately 95% even while holding all other parameters constant.

The "Free Space + RMD" or "Appendix D" approach advocated by the WCA compounds worst case assumptions and does not present a realistic view of the potential interference from Twin Falls to Boise. The "Free Space + RMD" or "Appendix D" model, was adopted to simplify analysis and regulatory review in the initial mix of two-way and one-way facilities when the overriding concern was protection of the sometimes distant one-way receive sites. Its simplifications are appropriate to ferret out any potential interference to high elevation high gain fixed receiving antennas for continuous analog television reception. But it is not the appropriate model for a rulemaking in which the Commission is trying to gauge "real world" interference from disparate operations. In fact, there are good reasons why the industry and the FCC may be rejecting use of the "Free Space + RMD" or "Appendix D" model in the future. The model is unworkable because, as the Teton study showed, it significantly overstates the potential for interference which, ultimately, hampers the ability to propose and provide services.

While we agree with WCA that "Free Space +RMD" is the required methodology for response station hub interference protection, there are in fact several other propagation models referenced in the Rules for other forms of interference protection in the MDS service. The rules still include requirements where an unobstructed electrical path is required before an interference analysis is indicated. In some parts of the rules a free space propagation model is required, but only at locations with an unobstructed path. Yet other requirements cite a "terrain sensitive propagation model." without any specification of "Free Space + RMD" or any of the other available models.

i.e. 47 C.F.R. 21.902(f)(6)i)

<sup>&</sup>lt;sup>2</sup> 47 C.F.R. 21.902(b)(5)(i)

<sup>&</sup>lt;sup>3</sup> 47 C.F.R. 21.902(f)(1)(i)

The point of the technical analyses was to clarify for the Commission that because WCA used an interference model which compounded worst case assumptions, it overstated the interference from Twin Falls to Boise by 95% or more. This is not insignificant. Using the Longley-Rice propagation model, which takes into consideration greater terrain detail and other important propagation factors, the study demonstrates that Teton's operations will not interfere with low-power cellular operations in the Boise metropolitan area. The nominal interference in outlying areas predicted by the study can be even further reduced if land use, clutter, realistic hub antenna patterns and elevations, and actual vertical alignment of antennas are included in the propagation model.

Should the Commission's Staff require further information or materials regarding the studies and statements provided or referenced herein, such will be promptly furnished upon request.

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17 March 2004

## CERTIFICATE OF SERVICE

I, Theresa Rollins, do hereby certify that I have on this 30th day of March, 2004, had copies of the foregoing *Ex Parte* Presentation delivered to the following via electronic mail:

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